## **CLAIMS**

## WHAT IS CLAIMED IS:

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1. A linear motor comprising:

a moving member comprising a core made of a magnetic material and coils wound around the core;

a stationary member, said moving member being slidably engaged with the stationary member; and

a heat dissipation portion;

wherein at least a part of the heat dissipation portion touches the core.

- 2. The linear motor of claim 1, wherein the heat dissipation portion pierces through the core of the moving member.
- 3. The linear motor of claim 1, wherein the heat dissipation portion pierces through a center of the core of the moving member and at one end of the heat dissipation portion is formed a heat dissipation fin.
  - 4. An apparatus for feeding electronic components comprising:

at least one unit base capable of carrying at least one component feeding unit which supplies electronic components loaded in a carrier tape at a predetermined pitch to a component pick-up position;

a platen for sliding the unit base thereon; and

a linear motor comprising at least one stationary member mounted on the platen and a moving member mounted on the unit base, said moving member comprising a core made of a magnetic material, coils wound around the core and a heat dissipation portion, at least a part of said heat dissipation portion touching the core.

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5. The apparatus for feeding electronic components of claim 4, wherein the heat dissipation portion pierces through the core of the moving member.

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- 6. The apparatus for feeding electronic components of claim 4, wherein the heat dissipation portion pierces through the center of the core of the moving member and a heat dissipation fin is formed at one end of the heat dissipation portion.
  - 7. An apparatus for feeding electronic components comprising: at least one unit base capable of carrying at least one component feeding unit; a platen for sliding the unit base thereon; and
- a linear motor comprising at least one stationary member mounted on the platen and a moving member mounted on the unit base;

wherein a heat dissipation portion is formed on the unit base for dissipating the heat in the moving member.

- 8. The apparatus for feeding electronic components of claim 7, wherein the heat dissipation portion comprises a heat dissipation fin which forms a unitary unit with the unit base.
  - 9. An apparatus for feeding electronic components comprising: at least one unit base capable of carrying at least one component feeding unit; a platen for sliding the unit base thereon; and
- a linear motor comprising at least one stationary member mounted on the platen through a supporting base for the stationary member and a moving member mounted on the unit base;

wherein the air from a ventilator is lead to an air supplying passage formed within the platen and blown to the moving member through an air exhaust port formed in the platen for cooling the moving member.

- 10. An apparatus for feeding electronic components comprising:
- at least one unit base capable of carrying at least one component feeding unit which supplies electronic components loaded in a carrier tape at a predetermined pitch to a component pick-up position;
  - a platen for sliding the unit base thereon;
- a linear motor comprising at least one stationary member mounted on the platen and a moving member mounted on the unit base;

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a cutter which cuts the carrier tape after the electronic components is picked up; and

a collection box which collects waste tapes cut off by the cutter by sucking air through an inhalation duct using a ventilator;

wherein the air from the ventilator is lead to an air supplying passage formed within the platen through an air exhaust duct and blown to the moving member through an air exhaust port opened in the platen for cooling the moving member.

- 11. The apparatus for feeding electronic component of claims 9 or 10, wherein the air exhaust port is formed in the platen within a range where the unit base moves during a component pick-up operation.
- 12. The apparatus for feeding electronic component of claims 9 or 10, wherein the air exhaust port is covered with a filter.